

Atty. Docket No. YOR920000390US1
(590.023)

REMARKS

An outstanding Office Action was mailed August 29, 2005, in which the pending claims were rejected and the rejection was made final. Applicants have, therefore, filed a Request for Continuing Examination along with this Amendment to further advance the prosecution of the present application.

Claims 1, 7, 8, 14, and 15 stand rejected under 35 USC 102(b) as being anticipated by Woodland et al. Claims 2-6 and 9-13 stand rejected under 35 U.S.C. 103(a) over Woodland et al. in view of U.S. Patent No. 6,272,462 to Nguyen et al. The independent claims have been amended. Independent claims 1 and 15, have been amended to recite, *inter alia*, “[g]enerating a word lattice having a plurality of paths based on the speaker data, wherein the step of generating the word comprises considering language model probabilities...”. Likewise, independent claim 8 has also been amended to recite substantially similar language. It should be understood, Applicants intend no change in the scope of the claims by the changes made by this amendment. It should be noted, these amendments are not in acquiescence of the Office’s position on the allowability of the claims, but merely to expedite prosecution. Reconsideration and withdrawal of the present rejections are hereby respectfully requested.

Similar language was presented for the Examiner’s consideration by the Applicants’ previous amendments. The independent claims prior to this Amendment included, generating a word lattice, wherein the generation of the work lattice takes into account language model probabilities. In response to the previous amendments the Office explained that it appeared the claimed elements were met by Woodland et al. because

Attr. Docket No. YOR920000390US1
(590.023)

"Lattices may contain copies of each word, and further copies can be required to encode the language model constraints. Language model scores correspond to 'language model probabilities'... Thus, Woodland et al. clearly discloses the limitation of 'generating a word lattice having a plurality of paths based on the speaker data, wherein the generation of a word lattice takes into account language model probabilities.'" (Office Action, page 7)(citations omitted)

Applicants most respectfully disagree and to the extent the Office may find the above rationale applicable to the presently amended claims the following remarks are in order. The independent claims, simply stated, do not address language model and acoustic model scores. In contrast to Woodland et al., Applicants' invention as presently claimed relates to language model probabilities. While model scores are broadly related to model probabilities they are, nevertheless, distinct subjects. There is no indication from the cited art or the state of the art at the time of the invention that indicates language model probabilities and language model scores are interchangeable equivalent terms. They clearly are not.

A language model is a probability distribution. When used in conjunction with a word lattice, the language model probability between two nodes is the probability of those two nodes appearing together in a word sequence. A language model score of a node can result from several different computations. One such score is the sum of all the probabilities of the subtrees of the node based upon association with the parent nodes of the subtrees. The score can also be computed using the Viterbi algorithm. Additionally, certain scores are computed using outside and inside scores for each node. These scores

Atty. Docket No. YOR920000390US1
(590.023)

may or may not take into account acoustic information, speaker information, and other outside factors that are not considered in language model probabilities.

It is unclear in the Woodland et al. reference how they obtain their language model scores. Woodland et al. at most disclose that the lattices of their invention contain both language model and acoustic information and can be used for rescoring with new acoustic models. Further, Woodland et al. disclose that each arc that connects the nodes of the lattice have associated language model and acoustic model scores. There is no mention, and, more importantly, no teaching or suggestion, in Woodland et al. that the arcs or the lattices are associated with or take into account language model probabilities.

It is respectfully submitted that Woodland et al. clearly falls short of present invention (as defined by the independent claims) in that, *inter alia*, it does not disclose generating a word lattice having a plurality of paths based on the speaker data, wherein the step of generating the word comprises considering language model probabilities. Accordingly, Applicants respectfully submit that the applied art does not anticipate the present invention because, at the very least, “[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under construction.” *W.L. Gore & Associates, Inc. v. Garlock*, 721 F.2d 1540, 1554 (Fed. Cir. 1983); *see also In re Marshall*, 198 U.S.P.Q. 344, 346 (C.C.P.A. 1978).

Regarding the present 35 USC 103 rejections, Applicants submit a *prima facie* case of obviousness cannot be established and therefore requests the withdrawal of the rejections based the combination of Woodland et al. and Nguyen et al. As the Examiner is aware, to establish a *prima facie* case of obviousness under 35 U.S.C. § 103 there must be: (1) a suggestion or motivation to modify a reference or combine references; (2) a

Atty. Docket No. YOR920000390US1
(590.023)

reasonable expectation of success in making the modification or combination; and (3) a teaching or suggestion to one skilled in the art of all the claimed limitations of the invention to which the art is applied. *See In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). It is respectfully submitted that the prior art alone or in combination fails to teach or suggest to one skilled in the art, *inter alia*, generating a word lattice having a plurality of paths based on the speaker data, wherein the step of generating the word lattice comprises considering language model probabilities; therefore, the claims are presently allowable and the immediate withdrawal of the outstanding rejections is again requested.

In view of the foregoing, it is respectfully submitted that independent Claims 1, 8, and 15 fully distinguish over the applied art and are thus in condition for allowance. By virtue of dependence from what are believed to be allowable independent Claims 1, 8, and 15, it is respectfully submitted that Claims 2-7, and 9-14 are also presently allowable.

/

/

/

Atty. Docket No. YOR920000390US1
(590.023)

In summary, it is respectfully submitted that the instant application, including Claims 1-15, is presently in condition for allowance. Notice to the effect is hereby earnestly solicited. Please note, submitted herewith is an Interview Request Form. Applicants' counsel would like the opportunity to discuss the presently amended claims in view of the cited art before the mailing date of the next Office Action. If there are any additional issues in this application, the Examiner is requested to contact the undersigned at the telephone number listed below prior to the issuance of an Office Action.

Respectfully submitted,



Stanley D. Ference III
Registration No. 33,879

Customer No. 35195
FERENCE & ASSOCIATES
409 Broad Street
Pittsburgh, Pennsylvania 15143
(412) 741-8400
(412) 741-9292 - Facsimile

Attorneys for Applicants